FILED
JAN 3 1956
HAROLD B. WILLEY, C

IN THE

Supreme Court of the United States

OCTOBER TERM, 1955

No. 603

IN THE MATTER OF THE APPLICATION

of

ENNIO DUCCI,

Petitioner,

THE COMMISSIONER OF PATENTS,

Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS

JOHN L. SEYMOUR and
BAUER AND SEYMOUR,
Attorneys for Petitioner,
30 Rockefeller Plaza,
New York 20, New York.

INDEX

	PAGE
The Question Presented for Review	4
The Constitutional Provision	7
The Right of Congress to Enact Legislation Pertaining to Patents	7
The Present Law	8
Statement of the Case	10
Federal Jurisdiction	12
Amplified Argument	13
Designation of the Record	20
APPENDIX:	
Decision of July 1, 1955	23
Erratum, dated July 25, 1955	35
Erratum, dated September 25, 1955	36
New Page Issued by Court to Replace Page 9 After Rehearing	37
Letter, dated September 29, 1955	38
Order, dated October 7, 1955	39

Cases Cited

PAGE

In re Craige, 90 PQ 33 ..... 4, 6, 11, 14

In re Ducci, 225 F. 2d 683; 107 USPQ 88 13

In re Kunz, 181 F. 2d 239; 85 PQ 239 17

McClurg v. Kingsland, 42 U. S. 202-206, 11 L. Ed. 102, 103 7

Seymour v. Osbourne, 11 Wall. 516, 555, 20 L. Ed. 33 6

In re Thomas, 178 F. 2d 412; 84 PQ 132 17

In re Thuau, 135 F. 2d 344; 554 O. G. 14 ..... 4, 6, 14

Union Sugar Refining v. Mathieson, Fed. Cas. 14397 5, 14

Statutes Cited

Title 28 U. S. C.:

Section 1256 4
Section 211 12
Section 1542 12

Constitution of the United States:

Article 1, Sec. 8 5

Title 35 U. S. C.:

Section 100 ..... 8, 18
Section 101 ..... 8, 18
Section 102 8
Section 103 9
Section 104 9

Miscellaneous

Journal of the Patent Office Society 15

IN THE

Supreme Court of the United States

OCTOBER TERM, 1955

No. .....

In the Matter of the Application

of

ENNIO DUCCI,

Petitioners,

THE COMMISSIONER OF PATENTS,

Respondent.

PETITION TO THE SUPREME COURT OF THE UNITED STATES

Petition for a writ of certiorari to review the judgment of the United States Court of Customs and Patent Appeals.

1a.

The case in which a review is sought is identified as in re Ducci, Appeal No. 6131, decided July 1, 1955, rehearing granted September 28, 1955, released October 7, 1955. 43 CCPA not published, 107 USPQ 88; 701 O. G. 462; 225 F. 2d 683.

1b.

i—ii

The case was decided July 1, 1955, rehearing was granted September 28, 1955, and the decision was made final October 7, 1955.

35 USC—Sec. 144. Decision on appeal

The United States Court of Customs and Patent Appeals, on petition, shall hear and determine such appeal on the evidence produced before the Patent Office, and the decision shall be confined to the points set forth in the reasons of appeal. Upon its determination the court shall return to the Commissioner a certificate of its proceedings and decision, which shall be entered of record in the Patent Office and govern the further proceedings in the case.

UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS

October Term, 1954

July 1, 1955

Patent Appeal No. 6131.

In the Matter of the Application

of

Ennio Ducci.

Subject Matter: Improvement in multicellular vitreous materials.

Serial No. 790,235.

Said appeal having heretofore been brought on to be heard before the court and due consideration thereon having been had, it is—

Ordered that the decision of the Board of Appeals be, and the same is hereby, affirmed.

I, CABELL N. PRYOR, Clerk of the United States Court of Customs and Patent Appeals, do hereby certify that the above judgment and the attached opinion are true and correct copies of the judgment and opinion of said United States Court of Customs and Patent Appeals filed the 1st day of July, A. D. 1955, in the above-entitled appeal, as the same remain upon the files and records of said court.

WITNESS my hand and the seal of this court this 7th day of October, A. D. 1955.

(Signed) CABELL N. PRYOR,
Clerk.

(SEAL)

The Clerk of the CCPA says that an entry of judgment was made on September 28, but that is not controlling under the statute and, in any event, was kept a secret, by the CCPA, to which the petitioner was not admitted.

They excuse themselves on the grounds that they had notified petitioner that a rehearing was granted.

It seems obvious that a rehearing is not a judgment or notice of entry thereof.

In any case, 35 USC 144 controls, and the date of the order is controlling as to all further proceedings.

Further, the clerk informed counsel that the order was not issued until October 7 so that further changes might be made in the decision if necessary. Hence, the decision never became final until the date of the order.

iii

The statute Title 28 U.S.C. Sec. 1256 confers jurisdiction on this court to review the judgment or decree in question by writ of certiorari. The statute reads as follows:

Sec. 1256. Court of Customs and Patent Appeals; certiorari. Cases in the Court of Customs and Patent Appeals may be reviewed by the Supreme Court by writ of certiorari.

1c.

The Question Presented for Review

The fundamental question concerns the right of the tribunals of the Patent Office, supported by the CCPA, to nullify the new provisions of the Patent Act of 1952, 35 USC 100 et seq. The Act expressly makes new uses of old materials patentable. RS 4886, the former law, did not include uses as a class of patentable subject matter, and the decisions of the CCPA, uttered prior to the Patent Act of 1952, often held that "new uses of old materials are not patentable" and equally often held that they are patentable. In the present case the tribunals below have adhered to the negative part of the former law, and have thus nullified the provisions of the Patent Act of 1952.

The decisions of Circuits and of courts under RS 4886 were in hopeless conflict and confusion. The new law introduced order. The Ducci decision at best restores chaos, and at worst defies the statute. The statute takes the affirmative side of the old controversy, but the court below takes the negative side. That is defiance of the spirit and violation of the letter of the new statute.

The tribunals of the Patent Office and the court below have adhered in this case to the principles of *in re Thuau*, 135 F. 2d 344; 554 O. G. 14, and a subsidiary case *in re Craige*, 90 PQ 33, which were decided under RS 4886.

The learned court adopts as its opinion the following:

> "• • • With respect to said Section 100(b), the latest published view on the matter is that 'the background

of the amendment gives reason to assume that a newly discovered use for a known substance, machine or process is still only patentable if it is not merely analogous or cognate to the uses heretofore made.' (*The New United States Patent Act in the Light of Comparative Law,* Stefan A. Reisenfeld, 34 Journal of the Patent Office Society 406, 416, June, 1954.) To this view the Commissioner subscribes."

"In the absence of authority to the contrary, we know of no reason to dispute the validity of the foregoing views expressed by Mr. Reisenfeld and the Commissioner of Patents."

The present decision is so vaguely worded that it is impossible to know its scope. Dealing with new uses, it does not define what a new use is. It makes no distinction between new uses and ordinary processes and strikes down everything patentable from failure to put a limit in its scope.

The Constitution of the United States, Article 1, Sec. 8, clause 8, reads as follows:

"The Congress shall have power * * * to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

The present doctrine strikes down that provision of the Constitution by holding in effect that new uses of old materials are not patentable. Inasmuch as all inventions are composed of new uses of old materials (*Union Sugar Refining* v. *Mathieson,* Fed. Cas. 14397), the effect of *in re Ducci* is to annul the patent law. If it stands, any tribunal can strike down any patent or any application for a patent by stating, without fear of contradiction, that it involves nothing more than a new use of an old material.

Subsidiary questions of law are involved in the decision but they are believed to be present only as faces for the main purpose of the decision, to annul the new-use provisions of the statute. Thus, they claim anticipation but the very terms they use, the number of references combined, casts doubt on the accuracy of the rejection.

> "Under the provisions of Rule 196(b), Rules of Practice, we are constrained to hold that claims 3 through 8, 13, 20, 21, 22. 23, 25 and 26 are unpatentable over the British patent or Long in view of the disclosures on pages 93, 94, and 95 of Glass, the Miracle Maker and in the Sullivan patents, and that claims 14 and 24 are unpatentable over Lambert or Slayter in view of the same secondary references."

This part of the decision violates every principle of anticipation and patentability that has been uttered by the Supreme Court of the United States since *Seymour* v. *Osbourne,* 11 Wall. 516, 555, 20 L. Ed. 33. It is in error of fact and in violation of the law of anticipation as laid down in this court.

In discussing the number of rejections the court asserted that four exist but said "The first two are all that need be considered here." Although the court stated that only two arguments need be considered, it did not actually consider them, but hastened to the reestablishment of *in re Thuau* and *in re Craige.*

If the new statute is to be given effect, it is urgently necessary that the Supreme Court of the United States shall give its attention in order that its opinion may be issued for the guidance of other courts who are confronted with the same problem. New uses must be defined and distinguished from other patentable classes of invention, so that men may know what the law means.

Another question arises of the right of judicial tribunals to render decisions which are contrary to the evidence which is before them. The present case discloses a new product which is a material advance in its field, and evidence of its superiority is in the record. No rebutting evidence is present. The decision as it stands is contrary to the evidence.

1d.

The Constitutional Provision

"The Congress shall have power * * * to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

The Right of Congress to Enact Legislation Pertaining to Patents

McClurg against *Kingsland,* 42 U. S. 202-206, 11 L. Ed. 102, 103:

> "The powers of Congress to legislate upon the subjects of patents is plenary by the terms of the Constitution, and as there are no restraints on its exercise, there can be no limitation of their right to modify them at their pleasure so they do not take away the rights of property in existing patents."

The former law did not include new uses as a class of patentable subject matter. R. S. 4886, 46 Stat. L. 376:

> "Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, or who has invented or discovered and asexually reproduced any distinct and new variety of plant, other than a tuberpropagated plant, not known

or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may upon payment of the fees required by law, and other due proceeding had obtain a patent therefor."

The Present Law

U.S.C. Title 35 Section 100: When used in this title unless the context otherwise indicates—

(a) The term "invention" means invention or discovery.

(b) The term "process" means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.

(c) The terms "United States" and "this country" mean the United States of America, its territories and possessions.

(d) The word "patentee" includes not only the patentee to whom the patent was issued but also the successors in title to the patentee.

Section 101—Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Section 102—A person shall be entitled to a patent unless:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application filed more than twelve months before the filing of the application in the United States, or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or

(f) he did not himself invent the subject matter sought to be patented, or

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Section 103—A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Section 104—In proceedings in the Patent Office and in the courts, an applicant for a patent, or a patentee, may not establish a date of invention by reference to knowledge or use thereof, or other activity with respect thereto, in a foreign country, except as provided in section 119 of this title. Where an invention was made by a person, civil or

military, while domiciled in the United States and serving in a foreign country in connection with operations by or on behalf of the United States, he shall be entitled to the same rights of priority with respect to such invention as if the same had been made in the United States.

The foregoing sections constitute chapter 10 of the Law of 1952 which chapter is entitled "Patentability of Inventions".

1e.

Statement of the Case

On December 6, 1947, Ennio Ducci filed an application Serial No. 790,235 for an invention in Multicellular Vitreous Materials. Translating that title to visual pictures, the invention is a rigid glass sponge. It is a glass brick filled with a multitude of pores, like a sponge. This glass brick is not compressible, unlike a natural sponge or cellulose sponge. Such multicellular glass objects have been known in the past but have suffered from imperfections which arise from imperfect compositions and from methods of manufacture.

Glass is not generally composed of a single ingredient but almost invariably is a compound of several or many ingredients. The number of different formulas employed or useful in producing different glasses with different properties is almost infinite.

The applicant discovered a group of glasses, previously not known to constitute a group, which, when employed in the manufacture of bubbly glass eliminated a whole series of objections to the former process and greatly improved the product. Thus, the invention involves the process and the product and the claims are so drawn. The inventor discovered that, if a glass composition having a linear coefficient of expansion lower than about 65 x 10^{-7} be used,

the difficulties of process were overcome and the product was greatly improved. The tribunals below do not question these facts.

The group of glasses which are useful, and which have the coefficient of linear expansion less than about 65 x 10^{-7} had never before been known to exist as a group. The discovery of the class of glasses having 65 x 10^{-7} or less as their coefficient of expansion is the discovery of this applicant, Ennio Ducci. This also is not denied.

Thus the first essential element of a decision founded on new use is lacking. To be within that law the class must have been known as such previously, otherwise it is a first use and not a new use.

Neither the references cited by the Examiner nor the references cited by the Board of Appeals discloses the specific group of glasses which constitutes the invention. Other groups of glasses are disclosed for other purposes but this group of glasses is not disclosed.

The Examiner finally rejected all claims and the Board of Appeals reversed the Examiner in the following terms:

> "We are of the opinion that since the Examiner does not question appellant's allegation that very considerable advantages are gained by substituting glass of the particular coefficient of linear expansion and of the particular chemical composition recited in the claims for the glass used in the patents, and particularly since he does not question the appellant's assertion that the problem of cooling the glass is considerably alleviated by this substitution, the patents fail to negative invention in this substitution of materials, because we find no suggestion therein that such a substitution should be made. Ajax Metal Co. v. Brady Brass Co., 155 F. (2d) 409; *In re* Worrest, 669 OG 944, 201 F. (2d) 930, 96 USPQ 381."

The Board of Appeals then abandoned appellate jurisdiction and did the work of the Examiner anew. It drew out new references which the Examiner had not considered pertinent, ignored the statute of 1952, and rejected the claims in view of the old RS 4886, Thuau doctrine as reflected in *in re Craige*.

A Petition for Reconsideration was denied December 16, 1953.

A notice of appeal to the Court of Customs and Patent Appeals was filed on January 15, 1954.

On July 1, 1955, the Court of Customs and Patent Appeals affirmed the Board of Appeals as expressly set forth hereinabove under section (b) and (c). A Petition for Reconsideration was filed and was denied in substance but an error was removed from the Court's opinion, on October 7, 1955.

1f.

Federal Jurisdiction

Title 28 U.S.C. Section 211 reads as follows:

> "Sec. 211—Appointment and number of judges. The President shall appoint, by and with the advice and consent of the Senate, a chief judge and four associate judges who shall constitute a court of record known as the United States Court of Customs and Patent Appeals."

Title 28 U.S.C. Section 1542 gives this court jurisdiction over Patent Office decisions as follows:

> "Sec. 1542—Patent Office decisions. The Court of Customs and Patent Appeals shall have jurisdiction of appeals from decisions of:
>
> (1) the Board of Appeals and the Board of Interference Examiners of the Patent Office as to patent applications and interferences, at the instance of an applicant for a patent or any party to a patent interference, and such appeal by an applicant shall waive his right to proceed under Section 63 of Title 35; and
>
> (2) the Commissioner of Patents as to trademark applications and proceedings as provided in section 1071 of Title 15."

1g.
Amplified Argument

(1) The Court of Customs and Patent Appeals has decided an important question of Federal Law which has not been, but should be, settled by this court.

There can be no doubt that the tribunals below intended the decision to bear upon the provisions of the statute relating to the patentability of new uses. That intention is expressed in the Official Gazette of the United States Patent Office, Vol. 701, No. 3, December 20, 1955, wherein on page 462 is found the official report of the decision in this case.

The syllabus in such cases is ordinarily carefully prepared by officials so that the meaning of the case shall be immediately apparent to bench and bar. That syllabus reads as follows:

U. S. Court of Customs and Patent Appeals
In re Ducci
No. 6131. Decided July 1, 1955
(225 F. 2d 683; 107 USPQ 88)

1. Patentability—Invention—Interpretation of Section 100(b) of the Patent Act of 1952 (35 U.S.C. 100). Held that, in the absence of authority to the contrary, no reason is known for disputing the validity of the view, expressed with respect to the definition imported into the statutes by section 100(b) of the Patent Act of 1952, that "the background of the amendment gives reason to assume that a newly discovered use for a known substance, machine or process is still only patentable if it is not merely analogous or cognate to the uses heretofore made."

The intention of the court below and of the Patent Office to use this case as a method of restoring the old law, if

such a mixture of conflicting decisions, can be called law, is thus demonstrated by their own words. They do not say that they "nullify", they say that they "interpret". Their interpretation results in nullification.

A second syllabus is found but that does not relate to any interpretation of law. We quote it so that there may be no doubt.

> 2. Same — Particular Subject Matter — Multicellular Glass and its Method of Manufacture. Claims to a multicellular glass product and claims to a process of manufacture multicellular glass Held unpatentable over the cited prior art.

No worse decision could have been rendered by the Court of Customs and Patent Appeals because it is expressed in such vague and indefinite words that no express meaning can be applied to it and under it. All processes and products can be denied patentability (Union Sugar Refining, *supra*). The Court states that new uses are only patentable under Sec. 100(b) "If it is not merely analogous or cognate to uses heretofore made." That leaves it to be determined what is an analogous use. That leaves it to be determined what is a cognate use. The words "analogous" and "cognate" are indefinite words having no fixed meaning and susceptible to any meaning which the speaker intends to give to it. By the use of these indefinite terms, the Court of Customs and Patent Appeals annihilated the entire patent statute.

This decision is worse than *in re Thuau* and worse than *in re Craige*. *In re Thuau* contained express limitations on its scope. The present decision has no limitation whatsoever. We believe that it is impossible to say that any particular use is not analogous to some other use. If you

start with a given material all uses of it can be asserted to be analogous to all other uses. If the word "analogous" be not sufficiently broad, the court has put in a word even more indefinite, "cognate". Certainly, every use which can be conceived of for a single substance may be regarded as cognate to all other uses. This cognateness arises, at least, from the fact that the same material is used in both cases.

The authority cited by the court for its decision is probably the most astonishing authority ever cited by a Federal court to sustain its decision. There is a small publication put out by the Examiners of the Patent Office called The Journal of the Patent Office Society. A private individual, having no brief for the Commissioner of Patents and no brief for Ducci, and having no brief for any other case of a similar kind, totally unrelated with the subject, having no position of official importance, wrote a moot article in which he expressed an opinion. It is with amazement that we find the court citing as authority the private view of an unknown person. In general, courts regard as authority the Constitution, the statutes, the decisions of the Supreme Court of the United States, and the prior decisions of its own body. In this case the court adopts as authoritative the opinion of this private individual. We quote the Honorable Court:

> "In the absence of authority to the contrary, we know of no reason to dispute the validity of the foregoing views expressed by Mr. Reisenfeld and the Commissioner of Patents."

We now quote from the Journal of the Patent Office Society referred to by the court:

> "• • • With respect to said Section 100 (b), the latest published view on the matter is that 'the background of the amendment gives reason to assume that a newly

discovered use for a known subsance, machine or process is still only patentable if it is not merely analogous or cognate to the uses heretofore made'."

This is the exact language which has been adopted in the syllabus to the Official Gazette report of the decision. The publication of that article in the Journal of the Patent Office Society, the reliance upon it by the Solicitor for the Commissioner of Patents, and the adoption of it by the Court of Customs and Patent Appeals would seem to indicate that it is not merely an innocent article, but that it may have been written and published with official knowledge, as a trailer for later action.

The failure of the court to define what it means by "new use", in rendering a decision which is supposed to set forth the practice and the law of new uses, its failure to distinguish and define new uses, makes it impossible for bench and bar alike to distinguish between a use which is a "new use" and a use which is a new process. A court which strikes down a statute, and promulgates a new law in replacement of that statute, should have defined its terms to an extent such that confusion would not result. It should have defined the primary term, "new use" with sufficient accuracy to distinguish it from those uses of old materials which constitute the traditional sort of process invention.

For this reason also, that the decision does not distinguish between those uses which are new uses, and those uses which are traditionally invention, the decision requires review and a pronouncement upon that point by the Supreme Court of the United States.

A true new use invariably employs a thing known, without change, for a new purpose. In the present case the

class of compounds defined in the claims, being glasses having a linear coefficient of expansion less than about 65 x 10^{-7} was not previously known, and is not capable of being called a new use. This has been acknowledged by the Court of Customs and Patent Appeals by striking out of page 9 of its decision the words "a table of value published there discloses the best glasses have linear coefficients of expansion below 65 x 10^{-7}." They eliminated that sentence from their opinion on reconsideration, but did not change their decision and still call it a rejection of a new use. The foundation upon which their decision had been made, namely that the class of compounds was known to be old and its use a new use was thus destroyed. It was not a new use of an old class because there was no old class. The discovery of the class was the discovery of this inventor.

The court thus includes inventions which are not new uses under the head of new uses and condemns them, thus extending the former law into an attack on the patentability of process inventions.

The Court of Customs and Patent Appeals has frequently allowed patents on new uses, and as frequently rejected them. For example, *in re Kunz,* 181 F. 2d 239; 85 PQ 239, is indistinguishable from *in re Thomas,* 178 F. 2d 412; 84 PQ 132. They both deal with the use of old compounds as insecticides and reach opposite results. The distinction between the cases does not establish a difference. This is only one of many examples.

The decisions of the several circuits under the former law are also in hopeless conflict. Even within each circuit, the decisions are in conflict. Some cases affirm, almost with violence, that no new use can ever be patentable. However, the same court a year later will declare that a

particular new use is patentable, or will seize on some unsubstantial difference as a basis for doing justice in spite of precedent. The results appear to indicate dissatisfaction with the former law, a realization that it could not produce a just result, that it was an unfair rule and unrealistic.

The number of cases in which new uses have been held patentable is probably greater than the number in which they have been held not patentable. It is not a case of a general rule having a specific exception, it is a case of an asserted rule which the courts have never adhered to, the departures from which are probably greater in number and more forceful in logic than the rule itself. We refer of course to those decisions which were uttered by the tribunals prior to the adoption of the new law.

The new law introduced order into this confusion. It adopted, in effect, those decisions favoring inventors, and is thus aligned with the policy of the Constitution. As the instant decision adopts the decisions unfavorable to inventors, the decision is contrary to the policy of the Constitution and in violation of the words of the statute. It is not to the advantage of the courts, the Governmental tribunals, or applicants for patents, that the ancient system of confusion and irreconcilable conflict should be resurrected.

35 U.S.C. 101 states that new processes are patentable to those who invent them.

35 U.S.C. 100 states that "process" includes a new use of a known process, composition of matter, or material.

This inventor Ducci, has an invention which the tribunals below assert to be a new use of old glass compositions of matter. As a new use, it is patentable under the new statute.

The decision holds it to be unpatentable, and to so hold, asserts that it belongs to a class of new uses that is not patentable, namely, those that are analagous to or cognate with old uses.

The statute has no such limitation; it does not say that "process includes new uses except those that are analogous to or cognate with old uses." It says that process includes new uses and that they are patentable. No limitation is placed on their patentability by the statute except such as apply to all inventions, such as that it shall, be new, useful, and advance the art. That this invention is new, useful, and advances the art is admitted.

The Court has imposed a limitation on the statute. No such limitation is found in the statute. We deny the right of a court to construe the statute so as to nullify all of it or part of it.

The limitation imposed by the court on the statute is so broad that it virtually eliminates it from the law. It is practically impossible to conceive of a new use that could not be called analagous to or cognate with an old use. We deny the right of any court to construe a statute into impotence, or so as materially to curtail its original significance.

When a statute is designed to remedy an existing uncertainty in the law, as is this statute, we deny the right of any court to restore the old law or the old state of confusion and uncertainty.

It was without doubt the intention of Congress that new uses should be patentable without other tests than those set forth in 35 U.S.C. 100-104, facing only the same tests of invention that are faced by new machines, new manufactures, new processes, new compositions of matter, or new materials.

The decision erects against new uses an additional test not provided by the statute, and in so doing exceeds what is permissible by law. The Court, dissatisfied with the act of Congress, legislates. We believe that to be improper.

Designation of the Record

The transcript of record to be certified by the Clerk of the U. S. Court of Customs and Patent Appeals shall include all matters included in the "Transcript of Record" which was filed with the said court in Patent Appeal Docket No. 6131, on appeal from the Board of Appeals.

In addition, it shall include the decision of the U. S. Court of Customs and Patent Appeals, dated July 1, 1955, the Petition for Reconsideration, dated November 11, 1953, the Erratum of July 25, 1955, the Erratum of September 28, 1955, including the substitute page provided by the court, the letter of Cabell N. Pryor, Clerk, of September 29, 1955, and the Order of the Court, dated October 7, 1955,

Respectfully submitted,

ENNIO DUCCI,
Petitioner.

JOHN L. SEYMOUR, and
BAUER and SEYMOUR,
Attorneys for Petitioner,
30 Rockfeller Plaza,
New York 20, New York.

APPENDIX

Decision of July 1, 1955.

UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS

IN THE MATTER OF THE APPLICATION OF ENNIO DUCCI.	October Term 1954. Patent Appeal No. 6131. Patent Calendar No. 72. Serial No. 790,235.

O'CONNELL, Acting Chief Judge:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office rejecting, in its original decision and on reconsideration, all the claims in appellant's patent application entitled "Multicellular Vitreous Materials." In the brief for the appellant, his counsel allege here that the invention defined by the 15 rejected claims is comprehensively stated in the following two claims:

> 3. As an article of manufacture, a multicellular glass product constituted by glass having a coefficient of linear expansion which is lower than about 65 x 10^{-7}.
>
> 13. A method for the manufacture of multicellular glass which comprises mixing pulverized glass having a coefficient of linear expansion lower than about 65 x 10^{-7} with a gas forming substance responsive to the temperature of softening of such glass, heating the mixture to the softening temperature of the glass, and cooling the resulting swollen material.

The board in its decisions relied in part upon the following references cited by examiner:

British Patent	447,805	May 26, 1936
Slayter	2,119,259	May 31, 1938
Long	2,123,536	July 12, 1938
Lambert	2,143,951	Jan. 17, 1939

The board, under the authority conferred upon it by Rule 196(b) of the Rules of Practice in the Patent Office, included the following publication and patents as additional references:

Glass—The Miracle Maker—by C. J. Phillips, Pitman Publishing Corp., 1941, pages 93, 94, and 95

Sullivan et al.	1,304,622	May 27, 1919
Sullivan et al.	1,304,623	May 27, 1919

With respect to that action of the board, and the qualifications of its members, we quote the following excerpt from the brief of the Solicitor for the Patent Office:

> "Rule 196(b) recites that 'Should the Board of Appeals have knowledge of any grounds not involved in the appeal for rejecting any claim, it may include in its decision a statement to that effect with its reasons for so holding, which statement shall constitute a rejection of the claims.' Under the requirements of 35 U. S. C. (1952) 7, the examiners-in-chief are 'persons of competent legal knowledge and scientific ability.' This Court has recognized the right of the Board to reject claims on grounds not applied by the examiner. *In re Heritage,* 33 C. C. P. A. 783, 153 F 2d 111."

The foregoing excerpt from the solicitor's brief was invoked because of arguments presented in the brief of

appellant as to the respective grounds of rejection advanced not only by the examiner but also by the board:

> "1. The Board of Appeals departed from the practices of an appellate tribunal and acted as a tribunal of first instance, citing new references and reasons of rejection. The new references are famous and were certainly known to the Examiner. They do not relate to bubbly glass. They do not teach anything about bubbly glass or about the process of making it. The Board confused the making of ordinary 'pyrex' solid glass cooking dishes with the process of making bubbly glass. The Examiner had not made that error.
>
> "The skilled people in the industry had not found in the Sullivan 'pyrex' patents the solution to the bubbly glass problem; not even though they were issued in 1919.
>
> "Similarly, even with the present invention before him, the Examiner did not deem the 'pyrex' patents to be anticipatory.
>
> "The Board, the least expert of all the groups before whom the pyrex patents have been displayed since 1919, alone thought them to be pertinent. However, the Board admittedly did not find an anticipation. It only found an obscure reference from which it could, having the present invention written out as a guide, by a clever series of deductions * * *, conclude that it 'involves no invention to use glass having a linear coefficient of expansion which is below 65 x 10^{-7}'."

In view of the extraordinary contribution to the art alleged by appellant, we have scrutinized the record with unusual care to see whether it contains any of the errors asserted on this appeal. Appellant in his specification and brief respectively describes the background which forms

the basis of the article and the method defined by the limitations of the claims on appeal. We quote these pertinent excerpts from different pages thereof:

> "The present invention relates to the manufacture of multicellular vitreous products which, as is known, are characterized by their properties of lightness, thermic and accoustic insulation, resistance to moisture and chemical agents, such qualities being highly valuable, especially for building purposes.
>
> "It is known that these products are obtained in a general way by causing the development of gaseous bubbles within a vitreous material which is molten or at least brought to a temperature above its softening point, and thereafter by cooling the resulting product.
>
> "The formation of gaseous bubbles may be obtained in particular by processes using substances capable of developing gases by chemical reaction with one another or by chemical reaction of at least one substance with some of the constituents of the vitreous material, or else by volatilization or decomposition of these substances.
>
> "Among these methods, it is known to use a mixture of pulverized vitreous material with a finely divided reducing substance, such as carbon, which is heated at a temperature at which the glass particles become soft and are joined one to the other simply by contact, the carbon, by reacting with the vitreous material at said temperature causing the formation of the gaseous bubbles within the vitreous material."
>
> • • • • •
>
> "The present invention has for its object to produce multicellular vitreous products from a vitreous material having a low expansion coefficient, i. e., a coeffi-

cient of linear expansion practically lower than about 65 x 10^{-7}.

* * * * *

"The usual glasses heretofore used in the manufacture of multicellular glass have a relatively high coefficient of linear expansion, of the order of 80 x 10^{-7} to 120 x 10^{-7}. Considering that a glass block in the massive state is already by itself a bad conductor of heat, this property is considerably increased for multicellular glass, for which it constitutes one of the primary desired properties.

"This property is due, on the one hand, to the presence of the cells which oppose heat transmission and, on the other hand, to the fact that the propagation of heat through the glass itself, along the partitions between the cells, is hindered by the very thin transverse section of these partitions. Under these conditions, when the inside of the article begins to harden, the outside is already hard and opposes the free contraction of this inner part so that tensions occur with the risk of breakage in the article."

Appellant's counsel contending, among other things, that Ducci by the instant invention "has taught the art what it did not know" before, and that the tribunals of the Patent Office erred in failing to acknowledge that fact, assert in their brief:

"Heretofore it has been thought by persons skilled in the art that all types of glass were equivalent and could be used equally without any of them showing a special advantage in the making of bubbly glass, or in the qualities of the bubbly glass made.

"The prior art cited by the Examiner and the prior art cited by the Board of Appeals alike is devoid of any

statement that would show one type of glass to be better for making bubbly glass than any other type.

"The applicant Ducci has discovered that there is a special type of glass whose use in the process reduces the length and size of lehrs, reduces the annealing time to one-third or less of its former extent, from 18 hours to 6 or even two hours for a piece of bubbly glass 10 cm. thick, reduces the investment in machinery, produces a superior bubbly glass, makes it possible to apply bubbly glass where it never could be applied before."

* * * * *

"It is in the nature of an act of genius that he discovered that a special category of glasses exists and that it is classified by its coefficient of linear expansion, not by its rate of heat transfer. This category is stated in the claims. It has a linear coefficient of expansion less than about 65 x 10^{-7}."

The Solicitor for the Patent Office in his brief offers the following pertinent notation regarding the significance of the term relied upon by appellant to endow his claims with patentability.

"Appellant * * * includes within the glasses he utilizes in making his articles all having a coefficient of linear expansion 'practically lower than about 65 x 10^{-7},' which is to say lower than about .0000065. (The exponent of 10 is equal to the number of decimal places through which the decimal point has been shifted. See second paragraph, page 137, *Chemical Engineers' Handbook,* Second Edition (McGraw-Hill Book Company, Inc., New York and London, 1941). * * *"

Appellant in support of its alleged contribution to the advancement of the art submitted an affidavit executed by the affiant Gordon relative to the reduction of the time and the quantity of equipment required for the effective cooling of the glasses utilized in his process. The factual situation thus established, the board held, disclosed that while appellant might have made an improvement, in reality he had achieved nothing that was not to be expected from the disclosure of the cited art and the lessons to be derived from its teaching by any person having ordinary skill in the art.

Several of the cited patents were regarded by the tribunals of the Patent Office as principal references. Those include the British patent of record, together with the patents to Long, Slayter, and Lambert. The pertinent disclosure of the British Patent was said by the board to be essentially the same in the patent to Long, as thus defined in this excerpt from the British patent contained in the board's decision:

> "The invention relates to a process for the manufacture of multi-cellular glass. It consists in heating, to the temperature at which the glass becomes soft and the glass particles concrete or are joined to each other by simple contact, a mixture of crushed glass with one or more powdered substances capable of developing gases or vapours at this temperature, (by reaction of these substances with the glass, or by reaction between the added substances alone, or by simple decomposition or release of occluded gases or vapours) and cooling the mixture thus heated when the gases or vapours produced have augmented its volume in the desired proportions for obtaining a predetermined apparent density."

The Solicitor for the Patent Office points out that the quoted excerpt just described recites all the procedural steps defined, for example, by the limitations of claim 13 on appeal. The Slayter patent discloses the formation of blocks from bubbly glass under vacuum and cooling them in an annealing lehr or oven. Owing to the vacuum within the block, it has a high insulating value. Lambert discloses a reduction process of pressure in molding bubbly glass into blocks and their subsequent slow cooling.

The quality of glass claimed by appellant as having a coefficient of linear expansion lower than about 65 x 10^{-7} is said to be disclosed in all the secondary references which were added by the board as hereinbefore described. The publication, *Glass—The Miracle Worker*, reports that with trivial exceptions, most substances, including glass, expand when heated and contract when cooled; that the mean linear coefficient of expansion is there defined as the change in length per unit of length per degree change in temperature; and that "when high thermal endurance is necessary, the coefficient must be small."

The publication also contains a formula expressing in a "complicated" manner the mean linear coefficient of expansion for a glass rod of a given length over a certain temperature range, but the complicated expression thus set forth in the reference, is also fully explained therein. A table of values published there discloses that the best glasses have linear coefficients of expansions below 65 x 10^{-7}.

The specifications in the respective patents to Sullivan, *et al.*, hereinafter identified as Sullivan, disclose glasses which meet the limitations, for example, of claims 3 and 13, which call for a "glass having a coefficient of linear expansion which is lower than about 65 x 10^{-7}." We quote the following excerpts from Sullivan 1,304,622:

> "The glass compositions here disclosed are sodium-borosilicates, in which the several ingredients are so

proportioned that the coefficient of expansion is kept very low, i.e., the linear coefficient is less than .000004; that the stability of the glass is maintained; that 'softness' is obtained and that disintegration is prevented.

* * * * *

"As examples of glass composition falling within the scope of this invention we have the following formulae:

	A.	B.	C.
Silica	70%	80.6%	90%
Alumina	6	2	1
Boric oxid	20	13	6
Sodium oxid	4	4.4	3

"The glass above given as B has been found to possess in a very high degree the valuable properties above named, its linear coefficient of expansions being .0000035, and its thermal conductivity being .0028. The expansion coefficient of glass A is .0000037 while that of C is about .0000023."

The values of the compositions A, B, C, and D, from certain data furnished by Sullivan, are thus defined in the brief of the solicitor:

Compositions	*Linear Coefficients of Expansion*
A	.0000037 (37×10^{-7})
B	.0000035 (35×10^{-7})
C	.0000023 (23×10^{-7})
D	.0000022 (22×10^{-7})

The specification of Sullivan 1,304,623 ascribes the low expansivity of the described glass to their high silica

contents. Both patents refer to thermal endurance as the power to undergo sudden cooling without fracture of the glasses. From the disclosures of Sullivan and other teachings therein set forth the board derived the conclusion that the thermal endurance of glass is greater as its coefficient of linear expansion is lowered.

More specifically, the solicitor has this to say in his brief, discussing the disclosure of the first of the two Sullivan patents, numerical references to pages of the record being here omitted:

> "The Board held that the superior properties of the glass appellant uses 'are due to a great extent to its linear coefficient of expansion.' The accuracy of this quoted statement is attested, *inter alia*, by claims 1 and 6 of patent No. 1,304,622. That patent describes and claims a heating vessel of 'Pyrex,' which must undergo sudden cooling without fracture. Such a vessel is defined in claim 1 as 'made of glass of low expansion'; the similar sole limitation in claim 6 is that the pressed baking dish is 'made of glass having a linear coefficient of expansion less than .000004.' The value of $.000004 = .0000040 = 40 \times 10^{-7}$. As representative of the claims on appeal, claims 3 and 13 call for 'glass having a coefficient of linear expansion lower than about 65×10^{-7}.' The value, 40×10^{-7} is 'lower than about 65×10^{-7}'."

There were four grounds of rejection applied in the rejection of the appealed claims. The first two are all that need be considered here. They are both contained in the following paragraph of the board's decision:

> "Under the provisions of Rule 196(b), Rules of Practice, we are constrained to hold that claims 3 through 8, 13, 20, 21, 22, 23, 25, and 26 are unpatentable

over the British patent or Long in view of the disclosures on pages 93, 94, and 95 of Glass, the Mircle Maker and in the Sullivan patents, and that claims 14 and 24 are unpatentable over Lambert or Slayter in view of the same secondary references."

The third ground of rejection, which relates to the method claims on appeal, is however a special source of controversy here. With respect to them the board said:

"* * * The method recited in these claims is substantially the same as the method disclosed in these references with the exception that a different type of glass is used therein. But this glass is analogous to the glass of the references and it is quite evident that it can be converted to multi-cellular glass by the method disclosed in the references. Under these conditions the invention does not reside in the method, as indicated by the following holding in *In re Craige, Jr.*, 650 OG 324; 38 CCPA 1114; 189 F. (2d) 620; 90 USPQ 33; 1951 CD 433:

"* * * It is further well settled that the substitution of a new and analogous material in an old method or process does not render the process patentable where the improved result is due solely to the quality of the material used."

Appellant declares the board was clearly erroneous in its decision and urges here that "the doctrine of *In re Craige*, 90 P. Q. 33 * * * turned upon the doctrine of *In re Thuau*, 135 Fed. (2nd) 244, 57 P. Q. 324, which held that new use of old materials were not patentable. It has been accepted by the courts and the patent bar that Section 100B of the Patent Act of 1952 overturned the Thuau doctrine, and, of course, the Craige decision with it."

Counsel for appellant, having made the quoted statement, has rested on his oars and cited nothing whatever to support his views. The solicitor has thus relied on certain expressed views which define the position of the Patent Office on the point in issue:

> "* * * With respect to said Section 100(b), the latest published view on the matter is that 'the background of the amendment gives reason to assume that a newly discovered use for a known substance, machine or process is still only patentable if it is not merely analogous or cognate to the uses heretofore made.' (*The New United States Patent Act in the Light of Comparative Law,* Stefan A. Reisenfeld, 34 Journal of the Patent Office Society 406, 416, June, 1954.) To this view the Commissioner subscribes."

In the absence of authority to the contrary, we know of no reason to dispute the validity of the foregoing views expressed by Mr. Reisenfeld and the Commissioner of Patents.

The record and briefs are replete with many additional arguments but we think that the contentions of the appellant and the tribunals of the Patent Office are clearly defined by what we have hereinbefore set forth. On that basis we agree with the action of the board and conclude, in view of the cited art, that appellant has done, without the exercise of the inventive faculty, only that which is obvious to any person skilled in the art.

AFFIRMED.

Jackson, J., retired, recalled to participate herein in place of Garrett, C. J.

Erratum dated July 25, 1955.

UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS

In the Matter of the Application of Ennio Ducci.	Patent Appeal No. 6131.

ERRATUM

Please make the following correction in the opinion of the court, handed down July 1, 1955, in the above-entitled appeal:

Page 12, lines 14 and 15, change
unpatentable
to read
patentable

CABELL N. PRYOR,
Clerk.

July 25, 1955.

Erratum dated September 25, 1955.

UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS

In the Matter of the Application of Ennio Ducci.	Patent Appeal No. 6131.

ERRATUM

Please make the following correction in the opinion of the court handed down July 1, 1955, in the above-entitled appeal:

> Substitute the enclosed page 9 for the original page 9, and return the incorrect page 9 to this office.

CABELL N. PRYOR,
Clerk.

September 28, 1955.

New Page Issued by Court to Replace Page 9 After Rehearing.

cooled; that the mean linear coefficient of expansion is there defined as the change in length per unit of length per degree change in temperature; and that "when high thermal endurance is necessary, the coefficient must be small."

The publication also contains a formula expressing in a "complicated" manner the mean linear coefficient of expansion for a glass rod of a given length over a certain temperature range, but the complicated expression thus set forth in the reference, is also fully explained therein.

The specifications in the respective patents to Sullivan et al., hereinafter identified as Sullivan, disclose glasses which meet the limitations, for example, of claims 3 and 13, which call for a "glass having a coefficient of linear expansion which is lower than about 65×10^{-7}." We quote the following excerpts from Sullivan 1,304,622:

> "The glass compositions here disclosed are sodium-borosilicates, in which the several ingredients are so proportioned that the coefficient of expansion is kept very low, i. e., the linear coefficient is less than .000004; that the stability of the glass is maintained; that 'softness' is obtained and that disintegration is prevented."
>
> * * * * *
>
> "As example of glass composition falling within the scope of this invention we have the following formulae:"

Letter dated September 29, 1955.

UNITED STATES COURT OF CUSTOMS
AND PATENT APPEALS

Washington 25, D. C.

September 29, 1955.

Mr. John L. Seymour,
30 Rockefeller Plaza,
New York 20, N. Y.

Re: *Ex parte Ennio Ducci. Patent Appeal No. 6131.*

Dear Sir:

On September 28, 1955, the petition of appellant for rehearing was granted solely for the purpose of omitting one sentence on page 9 of the opinion handed down July 1, 1955, without changing the conclusion. Therefore, yesterday I sent you an erratum enclosing with same a new page 9, with the request that it be substituted for the original page 9, and asking that the old page 9 be returned to this office.

Very truly yours,

CABELL N. PRYOR,
Clerk.

N

CC: Solicitor for the Patent Office
U. S. Patent Office,
Washington 25, D. C.

Order of October 7, 1955.

UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS

OCTOBER TERM, 1954

July 1, 1955

PATENT APPEAL No. 6131.

In the Matter of the Application

of

ENNIO DUCCI.

Subject Matter: Improvement in multicellular vitreous materials.

Serial No. 790,235.

Said appeal having heretofore been brought on to be heard before the court and due consideration thereon having been had, it is—

ORDERED that the decision of the Board of Appeals be, and the same is hereby, affirmed.

I, CABELL N. PRYOR, Clerk of the United States Court of Customs and Patent Appeals, do hereby certify that the above judgment and the attached opinion are true and correct copies of the judgment and opinion of said United States Court of Customs and Patent Appeals filed the 1st day of July, A. D. 1955, in the above-entitled appeal, as the same remain upon the files and records of said court.

WITNESS my hand and the seal of this court this 7th day of October, A. D. 1955.

(Signed) CABELL N. PRYOR,
Clerk.